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**pg. 4-469 - change second full paragraph:**

Based on average rotations of 60 years (40-80 years), it could be expected that those stands which fall outside such areas would provide 0 percent (0-12 percent) complex forests. However, the older forests produced and maintained in riparian areas, murrelet sites, and other such areas would benefit from the protection provided by surrounding stands if those stands are of sufficient development to buffer the effects of sun, wind, and predators. The distribution of complex forests will be determined largely by the location of proposed NRF management areas and Dispersal management areas...

**pg. 4-470 - change first paragraph under heading West-Side Planning Units:**

Alternative C would resemble Alternative B with some exceptions. The NRF-management areas would have a goal of 60 percent NRF instead of 50 percent NRF. It is not known how much additional habitat this would provide over the life of the plan in comparison to Alternative B. This aspect of Alternative C may not result in a drastic short-term changes from Alternative B because many areas are habitat and habitat-growth limited. Eventually, there will be some increase observed in older forests. The main difference between Alternatives B and C would likely occur as a result of the additional 83,000 acres of west-side NRF management areas provided under Alternative C. It can be assumed that these additional NRF areas would resemble the other NRF areas as predicted in Alternative B.

**pg. 4-470 - change forth paragraph under heading West-Side Planning Units:**

It is expected that Alternative C would provide greater amounts of complex forest than either Alternative A or B. Even if the 60 percent NRF goal resulted in no more complex forest, the approximately 83,000 acres of additional NRF management areas would likely result in 34 percent more complex forest at year 2096. At year 2096, it is expected that 50 percent of DNR-managed lands in the west-side planning units (excluding the OESF) would be in this habitat category. It is also expected that 58 percent of the NRF management areas, 48 percent of the Dispersal management areas, and 49 percent of the remaining areas would be in complex forest.

**pg. 4-471 - change first sentence under heading West-Side Planning Units:**

Alternative C is expected to provide the most complex forest (34 50 percent) followed by Alternative B (31 percent)...

**pg. 4-474 - change first paragraph:**

Under this alternative, some older forest is expected to occur in the 300-acre nest groves patches provided in the owl strategy during the research and transition phases of managing these sites. Most murrelet sites would be expected to eventually become older forest as would the 25-foot no-harvest riparian buffer and possibly even the 25- to 100-foot minimal-harvest zone.

**pg. 4-474 - change second paragraph:**

Based on DNR estimates, 12 percent of DNR-managed lands on the west side (excluding the OESF) would be in this habitat category at year 2096. This estimate includes riparian areas, unstable slopes, and murrelet sites, as well as nesting habitat provided for owls. The distribution of older forests will be determined largely by the location of NRF

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management areas and Dispersal management areas the 20,400 acres of owl nesting patches. At year 2096, it is expected that 12 percent of the Dispersal management areas, 32 percent of the NRF management areas, and 9 percent of the remaining areas would be in older forest.

**pg. 4-474 - change forth paragraph:**

...In Alternative C, it would be expected that greater than 12 percent, the amount that is expected under Alternative B, of the west side would be older forest at year 2096. 25 percent of DNR-managed land in the west-side planning units (excluding the OESF) would be in this habitat category at year 2096. It is also expected that 31 percent of the NRF management areas, 24 percent of the Dispersal management areas, and 23 percent of the remaining areas would be in complex forest.

**pg. 4-474 - change last paragraph on page:**

This alternative contains an objective of 20 percent of forest with structure equivalent in structure to those greater than 100 years in age, that normally found in forest at least 100 years in age, and it is likely that large portions of that 20 percent would be in this habitat category during the first 40-60 years...

**pg. 4-475 - change paragraph under heading West-Side Planning Units:**

It is estimated that Alternative A would provide more older forest (16 percent) than Alternative B (12 percent) or C (greater than 14 25 percent), but this would not be guaranteed. It is likely that Alternative C would provide more than Alternative B based primarily on the 60 percent NRF target, the additional NRF management areas, and the higher habitat-quality standards.

**pg. 4-476 - change second paragraph:**

...Unstable slopes may be deferred from harvest until more is learned about how these slopes can be managed without increasing the risk of mass wasting and erosion. It is likely possible that in the short term, and the long term to some degree, unstable slopes will make some contribution to interior forests. However, many such slopes are incapable of growing or supporting older forests. The stage of forest development on these unstable slopes varies across the landscape. One common factor is that they are located adjacent to or nearby streams or seeps. Although we do not know the size or shape of these patches, adjacency to the riparian corridor system should compliment the forests found within those corridors.

**pg. 4-477 - change first full paragraph:**

This alternative, which would eventually supply 50 percent of significant landscape areas in owl habitat, would logically be expected to produce significant amounts of interior forest in those areas.

**pg. 4-477 - change third full paragraph:**

This alternative, which would eventually supply 60 percent of significant landscape areas in owl habitat or better, would logically be expected to produce significant amounts of interior forest in those areas.

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**pg. 4-480 - delete first full paragraph and replace with:**

At year 2096, it is expected that 22 percent of DNR-managed lands in the west-side planning units (excluding the OESF) would be in this habitat category. It is also expected that 21 percent of the NRF management areas, 29 percent of the Dispersal management areas, and 21 percent of the remaining areas would be in closed canopy forest. More areas would be managed for NRF, and fewer would be managed as dispersal habitat.

**pg. 4-480 - change paragraph under heading Alternative 2:**

This alternative includes an objective that would maintain at least 40 percent of each landscape planning area as young forest marginal or higher quality habitat. Under this alternative, the harvest of stands younger than 100 years of age is distributed through time to strike a balance with regrowth. It is estimated that at year 2096, 5-10 percent of the OESF would be in closed forest.

**pg. 4-480 and 4-481 - change next to last paragraph on page:**

Little difference exists between alternatives. The No Action alternative might produce 29 percent closed-canopy forest at year 2096, but results under this alternative are highly variable. It is uncertain to what degree Alternatives B and C would vary from one another. It is estimated that Alternative B will contribute about 31 percent closed forest and that Alternative C will contribute about 22 percent.

**pg. 4-481 add to first partial paragraph:**

NRF management areas, 69 percent in the Dispersal management areas, and 58 percent in the remaining areas. In comparison, Alternative C would provide about 72 percent, with 78 percent of NRF management areas, 77 percent of Dispersal management areas, and 70 percent of the remaining areas.

**pg. 4-481 - change second paragraph under heading Remarks Relative to Cumulative Effects:**

Reduction in the amount and patch size of closed forests and older categories in certain landscapes (e.g., southwest Washington and the eastern portions of the Klickitat Planning Unit) may impact species utilizing contiguous forests such as the northern goshawk, and fragmentation and isolation may impact a number of low-mobility species.

**pg. 4-483 - change paragraph under heading West-Side Planning Units:**

Based on DNR estimates, 15-20-21 percent of DNR-managed lands on the west side (exclusive of the OESF) would be in this habitat category at year 2096. This estimate includes riparian areas, unstable slopes, and murrelet sites, as well as habitat provided for owls. Based on average rotations of 60 years (40-80 years), it could be expected that those stands which fall outside such areas would provide 33 percent (25-50 percent) dense pole forests. It is expected that there would be little difference between areas. For instance, at year 2096 under Alternative B, it is expected that dense pole forests would encompass 13 percent of NRF management areas, 16 percent of Dispersal management areas, and 23 percent of the remaining areas. At year 2096 under Alternative C, it is expected that dense pole forests would encompass 13 percent of NRF management areas, 10 percent of Dispersal management areas, and 18 percent of the remaining areas.

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**pg. 4-484 - change fifth paragraph:**

...It is expected that there would be little difference between areas. For instance, at year 2096 under Alternative B, it is expected that regeneration forests would encompass 5 percent of NRF management areas, 8 percent of Dispersal management areas, and 12 percent of the remaining areas. At year 2096 under Alternative C, it is expected that regeneration forests would encompass 7 percent of NRF management areas, 7 percent of Dispersal management areas, and 8 percent of the remaining areas for an overall average of 8 percent. It is expected that species such as the snowshoe hare will find sufficient amounts of foraging habitat throughout the planning period.

**pg. 4-485 - change last paragraph on page:**

Based on DNR estimates, 5 4-6 percent of DNR-managed lands on the west side (exclusive of the OESF) would be in this habitat category at year 2096. This estimate includes riparian areas, unstable slopes, and murrelet sites, as well as habitat provided for owls. Based on average rotations of 60 years (40-80 years), it could be expected that those stands which fall outside such areas would provide 17 percent (12-25 percent) open forests. It is expected that there would be some difference between areas. For instance, at year 2096 under Alternative B, it is expected that open forests would encompass 2 percent of NRF management areas, 6 percent of Dispersal management areas, and 7 percent of the remaining areas. At year 2096, under Alternative C, it is expected that open forests would encompass 3 percent of NRF management areas, 6 percent of Dispersal management areas, and 4 percent of the remaining areas. These same trends are likely for all alternatives.

**pg. 4-487 - change third subheading and paragraph under heading Wildlife Trees:**

**ALTERNATIVES B, C, AND 2; AND 3**

Alternatives B and 2 would employ a leave tree strategy which would focus on leaving at least two large trees per acre in harvested areas. This strategy would leave three snags per acre as well as three additional green recruitment trees per acre harvested. Large trees left in harvested units would be selected for characteristics important to wildlife and will provide habitat for many species which utilize openings. For example, bluebirds, violet-green swallows, kestrels, and Lewis' woodpeckers utilize snags and trees with cavities when they occur within and adjacent to open areas. Rufous hummingbirds utilize trees for nesting in very early stages of forest succession and rely on dense stems and foliage for nesting sites. Other species, such as sapsuckers, nuthatches, and flying squirrels would use snags once surrounded by forests of sufficient development. Greater experimentation regarding wildlife leave trees would be expected within the OESF. These alternatives should provide a much greater quality of leave trees and snags than the No Action alternative, but would not provide any additional snags.

**pg. 4-487 - add a forth paragraph under heading Wildlife Trees:**

**ALTERNATIVES C AND 3**

Alternatives C and 3 would employ a leave tree strategy which would focus on leaving at least two large trees per acre in harvested areas. Large trees left in harvested units would be selected for characteristics important to wildlife and will provide habitat for many species which utilize openings. For example, bluebirds, violet-green swallows, kestrels, and Lewis' woodpeckers utilize snags and trees with cavities when they occur within and adjacent to open areas. Rufous hummingbirds utilize trees for nesting in very early stages

of forest succession and rely on dense stems and foliage for nesting sites. Greater experimentation regarding wildlife leave trees would be expected within the OESP. These alternatives should provide a much greater quality of leave trees than the No Action alternative, but would not provide any additional snags.

**pg. 4-488 - add to first partial paragraph:**

...Snags would only be guaranteed in the short term (early seral stands) under Alternatives B and 2.

**pg. 4-488 - change first full paragraph:**

None of the other alternatives guarantee the provision of snags above current state regulations...However, a strategy which would provide clumps of leave trees and snags every 5 acres, such as proposed in Alternatives B and 2, would likely serve the needs of flying squirrels and other such species quite well. Flying squirrels are important prey species for several forest carnivores, including spotted owls. Important considerations with regard to wildlife are the amount, quality, and distribution of leave trees and snags. Vaux's swift, fisher, and marten require hollow snags which are often in short supply. Some species of trees, which rot more rapidly in the core leaving a structurally-sound shell surrounding a softer or hollow core, provide superior cavity-nesting opportunities for many species. Alternatives B and 2 will provide emphasis on the retention of these structures.

**pg. 4-491 - change second paragraph:**

Activities which may occur within the buffer will be addressed through adaptive management. are very clear for tThe management decisions for inner portion of the buffer, the no-harvest area (0-25 feet), and the minimal harvest area (25-100 feet), in eight of the planning units. Management activities in the outer portion of the buffer and the low harvest area (100 feet to the buffer's edge) are less defined will be developed to achieve the desired biological and economic conditions described earlier in this document. Alternative B would permit actions so long as there were no negative impacts to salmonid habitat, or current conditions are maintained. This would mean that water quality, sedimentation, temperature, and large woody debris would all be considered and management activity would be decided by DNR on a site-specific basis.

**pg. 4-491 - change third paragraph:**

Alternative B may have measurable impacts to some species, such as cavity excavators and cavity nesters. Alternative B allows removal within the inner buffer on a regular basis and thus allows the reduction in snag and cavity opportunities. In addition to providing large woody debris, shade, and other characteristics desired for aquatic species, the goals of the riparian areas include providing snags, downed logs, cavities, and characteristics important to riparian wildlife. Riparian areas are important sources of cavities for certain species, such as cavity-nesting ducks (e.g., wood ducks, Barrow's golden-eye, hooded mergansers, and buffleheads).

**pg. 4-491 - change sixth paragraph:**

The action alternatives would provide substantially more riparian habitat protection than the No Action alternatives. The action alternatives may lack detail in the description of



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potential actions to fully assess the impacts to all aquatic and terrestrial species at this time, but Alternative B establishes a process to ensure the necessary characteristics are achieved. None of the action alternatives specify the density and size of trees to remain...

**pg. 4-494 - change third subheading and paragraph under Cliffs:**

**ALTERNATIVES B, C, AND 2, AND 3**

These action alternatives state that mining of rock from cliffs for road construction would be avoided when materials can otherwise be reasonably acquired when practicable, that an evaluation will be conducted to identify important wildlife features which may exist, and that site-specific prescriptions would be developed where appropriate.

**pg. 4-494 - insert new forth subheading and paragraph under heading Cliffs:**

**ALTERNATIVES C AND 3**

These alternatives state that mining of rock from cliffs for road construction would be avoided when materials can otherwise be reasonably acquired and that site-specific prescriptions may be developed.

**pg. 4-494 - change paragraph under subheading Comparison Among Alternatives And Remarks Relative to Cumulative Effects:**

Alternatives B and 2 provide for an assessment of wildlife values and establishing a site-specific plan when necessary to protect those values. The other action alternatives offer little additional protection over the No Action alternative. Unless species are present that would require additional actions (i.e., peregrine falcons), it is assumed that little protection would be provided unless it came at no economic cost. Both of these The action alternatives may contribute to maintaining most cliff areas intact. However, none of the only Alternatives B and 2 address the maintenance of vegetation within and adjacent to cliff areas for the use of nesting birds or for the maintenance of shelter from the elements. All alternatives could result in some level of impact to cliff-dependent species.

**pg. 4-495 - insert new second subheading and second paragraph on page:**

**ALTERNATIVES B AND 2**

Alternatives B and 2 would provide a 100-foot buffer around talus fields over 1 acre in size (1/4 acre in some key areas). Talus fields would not incur any harvest; however, within the buffer, harvest might occur so long as it maintained 60 percent canopy coverage. In forested talus areas outside those buffers, harvest can occur so long as no more than 1/3 of the volume is removed during each rotation. Within talus fields and associated buffers, road building will be avoided, provided that the routing of roads around such areas can be accomplished in a practical manner that is consistent with other objectives of a comprehensive landscape-based road network plan. These buffers should help maintain the integrity and microclimate of the talus fields, as well as provide a supply of coarse woody debris.

**pg. 4-495 - change subheading Alternatives B, C, 2 and 3 and related paragraph:**

**ALTERNATIVES B, C, 2, AND 3**

These action alternatives would provide a 100-foot buffer around talus fields over 1 acre in size. Talus fields would not incur any harvest; however, within the buffer, a harvest of up to a third of the volume might occur during each rotation. If that harvest occurred

frequently, such as once each decade, little shading and microclimate protection would remain and few snags or downed logs of any substantial size would be provided, which is important to species such as the Larch Mountain salamander. But, at a minimum, the talus field itself would not be harvested and, if it were capable of supporting large trees, it might provide shade and a supply of downed logs. Yarding would generally not disrupt talus under the action alternatives, yet there is no guarantee of how often or to what extent disruption might occur.

**pg. 4-495 - change third paragraph:**

It appears that talus-dependent species would be better off under the action alternatives than under the No Action alternative because the talus field itself would not be subject to timber harvest and yarding would often avoid talus fields. Alternatives B and 2 provide a forested buffer around talus fields as well as protection of forested talus. Disruption will be much less frequent under these alternatives. However, under Alternatives C and 3, it is unclear to what extent the nature of those habitats would be maintained for the long-term survival of species given the lack of certainty regarding disruption of the talus fields and the treatment of the immediately surrounding timber.

**pg. 4-495 - change next to last paragraph on page:**

...Removal of conifers would be especially beneficial on the west side of the Cascade mountains Range. Although Approximately 25 to 50 percent of the canopy coverage would be retained, much of this could be due to coverage by shrubs.

**pg. 4-498 - change partial paragraph:**

...These effects, however, are very much interrelated with the effects of local and landscape levels of cover. Some species are affected to a greater degree by road densities. Excessive road densities (greater than 1 mile per section) may also preclude use of those areas by grizzly bears. Direct mortality of many species also increases in proximity to open roads. Other species may be impacted in other ways. Dust accumulation near roads may inhibit necessary functions for some smaller animals. The use of herbicides, pesticides, and fertilizers may have impacts upon the usability of habitats for many species and may contribute to direct mortality as well. This will be particularly true for many invertebrates or for species dependant on sensitive broad-leaved plants. Additional impacts and exclusion from habitats may occur from activities which are unrelated to this plan. However, the expected impacts to reducing habitat availability are relatively similar under all alternatives.

4.6	Soil	No change
4.7	Air Quality	No change
4.7.1	Affected Environment	No change
4.7.2	Forest Management	No change
4.7.3	Alternatives	No change
4.8	Water Quality	No change
4.8.1	Affected Environment	No change
4.8.2	Evaluation	No change
4.9	Cultural Resources	No change
4.9.1	Affected Environment	No change

## 4.10 Economic Analysis of DNR's Habitat Conservation Plan

**pg. 4-529 - change first line in first paragraph:**

This section provides a brief analysis of the economic impact of the proposed HCP alternatives on Washington's economy...

**pg. 4-529 - change second paragraph:**

...This analysis focuses on timber-related employment and employment income as a policy-relevant indicators of the HCP alternatives and their impacts on the region's economy.

**pg. 4-529 change second paragraph under heading Economic Background:**

Lumber and paper products are a significant component of the economy of the region west of the Cascades. Table 4.10.1 summarizes this dependency through employment by sector statistics. Regions near Seattle-Tacoma have denser populations and more diverse economies.

**pg. 4-530 - change third paragraph:**

...Competition from southern forests and imports, technological changes, and exhaustion of old-growth forests confronted the industry with new challenges (Schamberger et al. 1992). In the past, log production for export provided some "slack" in the production system.

**pg. 5-530 change first paragraph under heading Methods:**

Limitations of time and information restrict the sophistication of the economic analysis of the proposed alternative harvest schedules. The U.S. Forest Service has developed a series of multipliers based on the number of jobs created and income generated by the harvest of 1 million board feet of timber. Any increase in harvest volume has a direct effect in the timber industry.

**pg. 4-531 - change fourth paragraph:**

Data provided by DNR are based on 10-year forecast periods. Sustainable harvest calculations suggest the volume of harvest by age class of trees. Annual harvest quantities are required for the multiplier analysis, so 10-year harvest totals were divided by 10. Actual annual harvests will vary because of weather, market conditions, and other events. Employment and income impacts are shown as a range of probable changes to demonstrate the degree of uncertainty about actual harvests.

**pg. 4-531 - change paragraph under heading Results:**

Tables 4.10.1 and 4.10.2 show the annual harvest levels and the associated employment and employment income impacts for each alternative analyzed. Estimated harvest levels for the alternatives are divided into two categories: expected and low. The expected harvest levels represent average annual harvest levels based on the projection of DNR-managed land harvest levels for the first decade (see Appendix 5 for a discussion of the assumptions used for the harvest analysis projections)...



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**pg. 4-532 - change first full paragraph:**

Table 4.10.1 shows that total regional expected annual harvest levels under Alternative B would be 7.1 percent greater than under the No Action alternative. This Implementation of Alternative C would result in a 3.4 percent decrease in timber-related employment in annual harvest levels compared with the region, other things being equal No Action alternative. Under low harvest levels, Alternative B would result in a 23.5 percent harvest increase over the No Action alternative, resulting in a 19.5 percent increase in timber-related jobs. Under low harvest levels, Alternative B would result in a 23.5 percent harvest increase over the No Action alternative. Alternative C would result in a decrease of 3.4 percent.

**pg. 4-532 - change last paragraph:**

Table 4.10.2 shows annual harvest levels and timber-related employment by alternative and by planning area. For expected harvest levels, the table shows that job impacts, based on percentage increases, would be concentrated in the east-side and OESF planning units. For the east-side planning units, harvest levels and timber-related employment and income would increase by 24.7 and 32.6 over 32 percent respectively for Alternative B compared with the No Action alternative. For the OESF Planning Unit, both harvest levels and timber-related employment and income under Alternative B would increase by 42.9 percent. For the west-side planning units, harvest levels and employment would be similar under both Alternatives A and B.

**pg. 4-533 - add after Table 4.10.2:**

For low harvest levels, the OESF Planning Unit would have the highest percentage increase for employment and income under Alternative B when compared with the No Action alternative. The east-side planning units would have the next highest percentage increase, and the west-side planning units have the smallest increase.

Under the expected harvest projections, Alternative C would result in a decrease in timber-related employment and income for all three areas compared with the No Action Alternative. The west-side would experience a 21 percent decline in employment and income; the east-side about a 9 percent decline and the OESF a 38 percent decline. Under low harvest projections, the east-side would show a 5.4 increase in employment and income compared with the No Action Alternative; the west-side, a 9 to 10 percent decline in employment and income; and the OESF, about a 29 percent decline.

Overall, under expected harvest projections, Alternative B would result in a 3.4 and 3.0 percent increase in timber-related employment and associated income, respectively over the No Action alternative; Alternative C would result in a 22 percent decrease for both employment and income.

Under low harvest projections, Alternative B would result in an increase of 19 percent over the No Action alternative for both employment and income. Alternative C would decrease employment and income around 10 percent.

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## 4.11 Cumulative Effects

**pg. 4-536 - change item (3):**

Large forest landowners and managers, in search of ways to resolve conflict among the many growing demands, will look increasingly toward processes that define a niche for their lands and will create specific, objectives-based plans to achieve them. ~~Since no forest land can do all things for all people, what contribution can be made on specific lands? And what mix of certainty and flexibility can be achieved?~~

**pg. 4-537 - change first paragraph under subheading West-Side Planning Units:**

Alternative B provides a landscape-level, habitat-based strategy for providing conservation in western Washington for a broad range of species and habitat types. The primary emphasis is on spotted owls, marbled murrelets, and riparian habitat;...

**pg. 4-540 - change the end of the paragraph:**

...Alternative C is more conservative than Alternative B in providing for greater certainty of conservation benefits. Alternative 3 is more conservative than Alternative 2 in applying an experimental approach to achieving a habitat-based strategy for integrating production and conservation.

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## 5. List of Preparers (delete entire section and replace with)

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Dan Varland, *Rayonier*

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*The following individuals contributed to the development of a plan for the OESF, parts of which were subsequently incorporated into the HCP. Team leaders are indicated by an asterisk.*

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Rick Cahill, *Dave Christiansen, and*  
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6. Distribution List	No change
APPENDIX A - DNR's Forest Management	No change
APPENDIX B - Geology/Soils/Vegetation	No change
APPENDIX C - Calculating Juvenile Survival Rates and the Finite Rate of Change of the Spotted Owl Population on the Olympic Peninsula	No change
APPENDIX D - Methods for the Evaluation of Conservation Alternatives For Spotted Owl on the Oesf	No change
Glossary	No change

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### Add to the reference list:

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## Matrices

1a	Management strategies for HCP (excluding OESF)	No change
1b	Management strategies for alternatives related to the OESF Planning Unit	No change
2a	Summary of environmental consequences in western Washington (excluding OESF)	No change
2b	Summary of environmental consequences in eastern Washington (within HCP planning area)	No change
2c	Summary of environmental consequences in Olympic Experimental State Forest	No change
4.2.1a	Comparison of the alternatives by all criteria	No change
4.2.1b	Management strategies for HCP (excluding OESF)	No change
4.2.3	Management strategies for HCP (excluding OESF)	No change
4.3.1	Management strategies for HCP (excluding OESF)	No change
4.4.1	Management strategies for alternatives related to the OESF Planning Unit	No change

### 4.4.2a Management strategies for alternatives related to the OESF Planning

#### pg. 4-246 - change bullet (1) in second column:

(1) those that average ~~146~~ 144 feet (slope horizontal distance) on Type 1 Waters, ~~136~~ 134 feet on Type 2 waters, 95 92 feet on Type 3 Waters, ~~96~~ 87 feet on Type 4 Waters, and ~~105~~ 95 feet on Type 5 Waters [totals approximately 55% of the riparian areas in the OESF] and,

4.4.2b	Summary of potential environmental consequences for OESF riparian strategy	No change
4.4.3a	Management strategies for alternatives related to the OESF Planning Unit	No change
4.5.1a	Management strategies for HCP (excluding OESF)	No change
4.5.1b	Management strategies for alternatives related to the OESF Planning Unit	No change

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## 4.5.2a Management strategies for HCP (excluding OESF)

pg.4-366 - change third paragraph in third column:

Unlisted species protected through spotted owl, marbled murrelet, and riparian conservation strategies, protection of uncommon habitats, and additional mitigation for species of concern particular species...
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4.5.2b Management strategies for alternatives related to the OESF Planning Unit

No change

pg. 4-462 - change third column of Matrix 4.5.4a:

Alternative B Proposed HCP
...(1) talus fields larger than 1 acre: no harvest, 100-foot buffer with 60% canopy coverage; Forested talus: maximum harvest of 1/3 (vol.), yarding generally cannot physically disrupt talus, includes provision for mining of talus and road construction,

pg. 4-463 - change third column of Matrix 4.5.4a:

Alternative B Proposed HCP
with preference given to wildlife trees; applicable safety standards will be followed; attempt will be made to retain at least 2 live trees per acre harvested and at least 1/2 of the trees retained from the largest diameter class available; three snags per acre and three other green recruitment trees per acre; leave trees may be clumped.

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4.5.4b Management strategies for alternatives related to the OESF  
Planning Unit

No change

**Tables**

1.1	Summary of public information and involvement for DNR's conservation planning project	No change
2.5.1	Key to potential alternatives related to eight planning units in HCP area (excluding OESF)	No change
2.5.2	Summary of management under the No Action alternative	No change
2.5.3	Summary of management under Alternative B	No change
2.5.4	Summary of management under Alternative C	No change
2.6.1	Key to potential alternatives related to Olympic Experimental State Forest (OESF)	No change
2.6.2	OESF management under Alternative 1 (No Action)	No change
2.6.3	OESF management under Alternative 2 (Unzoned Forest)	No change
2.6.4	OESF management under Alternative 3 (Zoned Forest)	No change
3.1.1	Approximate acreage covered by the HCP by trust category	No change
3.1.2	Acreage by ownerships within the HCP plan vicinity	No change
3.4.1	DNR-managed lands by age class for even-aged stands	No change
3.4.2	DNR-managed lands by dominant size class for uneven-aged stands	No change
4.2.1	Threats to the spotted owl population as described in the Final Draft Recovery Plan for the Northern Spotted Owl (USDI 1992b)	No change
4.2.2	Habitat and spotted owl site centers protected under the President's Forest Plan	No change
4.2.3	Distribution of potential spotted owl habitat estimated by forest stands 70 years old and older on DNR-managed lands in the five western Washington planning units by distance band from federal reserves	No change
4.2.4	Distribution of potential spotted owl habitat estimated by the multiple data source method on DNR-managed lands in the five western Washington planning units by distance band from federal reserves	No change
4.2.5	Number of territorial spotted owl activity centers within a median home range radius of DNR-managed lands in distance bands from federal reserves	No change
4.2.6	Analysis of spotted owl habitat within an exclusive home range radius of all known territorial site centers in the HCP planning area	No change
4.2.7	Distribution of projected unknown spotted owl site centers that may influence unsurveyed DNR-managed lands and known sites that influence DNR-managed lands	No change
4.2.8	Change in amount of potentially suitable spotted owl habitat on DNR-managed lands in the five west-side planning units under Alternative A (using forests 70 years old and older as habitat estimation method)	No change

4.2.9	Change in amount of potentially suitable spotted owl habitat on DNR-managed lands in the five west-side planning units under Alternative A (using multiple data source method of habitat estimation)	No change
4.2.10	Change in amount of suitable spotted owl habitat expected by the year 2096 for the five west-side planning units under Alternative B (habitat estimated as forests 70 years old and older)	No change
4.2.11	Change in amount of potential suitable spotted owl habitat under Alternative B in the five west-side planning units using the multiple data source method of habitat estimation	No change

pg. 4-42 - change Table 4.2.12:

**Table 4.2.12: Change in amount of suitable spotted owl habitat expected by the year 2096 for the five west-side planning units under Alternative C (habitat estimated as forests 70 years old and older)**

<b>A. Within NRF Management Areas</b>	
<b>Expected Suitable Habitat:</b>	
Acres potential habitat in 1996	80,497
Net acres to be developed to meet HCP goal	65,603
Total acres spotted owl habitat by 2096	<b>146,100</b>
<b>B. Outside NRF Management Areas</b>	
Acres of forests older than 70 years outside of NRF areas in 1996	105,503
Acres of forests older than 70 years with potential incidental benefit to spotted owls in 2096	<del>unknown</del> 447,300



pg. 4-43 - change Table 4.2.13:

**Table 4.2.13: Change in amount of suitable spotted owl habitat expected by the year 2096 for the five west-side planning units under Alternative C (multiple data source method used to estimate habitat)**

<b>A. Within NRF Management Areas</b>	
<b>Expected Suitable Habitat:</b>	
Acres potential habitat in 1996	98,430
Net acres to be developed to meet HCP goal	47,670
Total acres spotted owl habitat by 2096:	<b>146,100</b>
<b>B. Outside NRF Management Areas</b>	
Acres of forests older than 70 years outside of NRF areas in 1996	267,570
Acres of forests older than 70 years with potential incidental benefit to spotted owls in 2096	<del>unknown</del> 447,300

- 4.2.14 Change in distribution of potential spotted owl habitat as estimated by forests older than 70 years from 1996-2096 for Alternatives A, B, and C No change
- 4.2.15 Summary of habitat conditions within a median home range radius of spotted owl activity centers that influence DNR-managed lands: total amount of habitat within spotted owl circles No change
- 4.2.16 Summary of habitat conditions within a median home range radius of spotted owl activity centers that influence DNR-managed lands: amount of habitat on DNR-managed lands within spotted owl circles No change
- 4.2.17 Landowner/manager status at territorial activity centers that are on or within 2.0/2.7 miles of DNR-managed lands in the five west-side planning units No change
- 4.2.18 Estimates of likelihood of long-term persistence of known spotted owl site centers under Alternative A No change
- 4.2.19 Assessment of territorial spotted owl site centers for risk of incidental take outside of proposed NRF management areas under Alternative B No change
- 4.2.20 Assessment of incidental take of territorial spotted owls at site centers affected by management of DNR NRF areas under Alternative B in the near term No change

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4.2.21	Assessment of incidental take of known territorial spotted owls affected by management of DNR NRF areas under Alternative B assuming 50 percent habitat levels on NRF areas within spotted owl circles	No change
4.2.22	Alternative B - projections of the number of spotted owl site centers with owl circles overlapping NRF management areas in the five west-side planning units	No change
4.2.23	Assessment of risk of incidental take of resident owls at site centers located outside of proposed NRF management areas under Alternative C	No change
4.2.24	Assessment of incidental take of territorial spotted owls affected by management of DNR NRF areas under Alternative C in the near term	No change
4.2.25	Assessment of incidental take of territorial spotted owls occupying known site centers affected by management of DNR NRF areas under Alternative C assuming a 60 percent habitat level	No change
4.2.26	Alternative C - projections of the number of spotted owl activity centers with owl circles overlapping NRF management areas in the five west-side planning units	No change
4.2.27	Comparison of provision of dispersal habitat among alternatives for the five west-side planning units assuming that both Dispersal and NRF management areas have reached their target levels of habitat	No change
4.2.28	Old-growth, large-saw, and small-saw forests below 3,500 feet and less than 66 miles from marine waters by ownership	No change
4.2.29	Age (years) when four and eight trees per acre, 32 inches dbh and larger occur in fully stocked and lower stocked managed stands in coastal Douglas-fir stand types	No change
4.2.30	Age (years) when four and eight trees per acre 32 inches dbh and larger occur in fully stocked and lower stocked managed stands of coastal stern hemlock stand types	No change
4.2.31	Estimated acreage of marbled murrelet habitat on DNR-managed lands by stand type and planning unit before deferral and occupancy rates are taken into account for each alternative	No change
4.2.32	Estimated acres of marbled murrelet habitat on DNR-managed lands for No Action (Alternative A) taking into account deferral rates for each inland zone currently implemented by DNR	No change
4.2.33	Estimated acres of marbled murrelet habitat protected on DNR-managed lands for Alternative B taking into account the expected stand occupancy rates (percent of stands surveyed and found to be occupied) for each planning unit	No change
4.2.34	Summary of the environmental consequences of the No Action and Habitat Conservation Plan alternatives according to the two biological criteria	No change
4.3.	Spotted owl site centers (status 1, 2, and 3) within a median home range radius of DNR-managed lands by planning unit	No change

- 
- 4.3.2 Spatial distribution relative to federal reserves of spotted owl site centers (status 1, 2, and 3) within a median home range radius of DNR-managed lands No change
- 4.3.3 Summary of habitat conditions within a median home range radius of spotted owl site centers that are influenced by DNR-managed lands. Presented as the proportion of owl circle that is classified as habitat No change

pg. 4-188 - change first row of Table 4.3.4

**Table 4.2.34: Summary of the environmental consequences of the No Action and Habitat Conservation Plan alternatives according to the two biological criteria**

Criteria	Alternative A No Action	Alternative B Proposed HCP	Alternative C
Amount of nesting habitat protected by each alternative in near term	60,283 acres of potential nesting habitat deferred over an unknown time period.	38,442 acres of occupied nesting habitat protected over a 10 year period. Suitable, unoccupied habitat protected in southwest Washington.	60,664 acres of occupied nesting habitat and suitable unoccupied habitat protected over a 10-year period.

- 4.3.5 Total DNR-managed lands and DNR-managed lands classified as spotted owl habitat by planning unit No change
- 4.3.6 Spatial distribution relative to federal reserves of DNR-managed lands and DNR-managed lands classified as owl habitat No change
- 4.3.7 DNR-managed lands currently in owl circles by planning unit No change
- 4.3.8 Spatial distribution relative to federal reserves of DNR-managed lands currently in owl circles No change
- 4.3.9 Alternative A: DNR-managed forest classified as spotted owl habitat available for harvest in the three east-side planning units No change
- 4.3.10 NRF management areas by planning unit No change
- 4.3.11 HCP alternatives: DNR-managed forest classified as spotted owl habitat available for harvest in the three east-side planning units No change
- 4.3.12 Comparison of alternatives. Projected change in the spatial distribution of spotted owl habitat by planning unit No change
- 4.3.13 Comparison of alternatives. Projected change in the spatial distribution of spotted owl habitat by distance band No change
- 4.3.14 Projected impacts to known spotted owl site centers under

pg. 4-209 - change second column of Table 4.3.15:

**Table 4.3.15: Assessment of incidental take of spotted owl site centers that have owl circles outside of proposed NRF management areas for the east-side planning units**

Alternative B  (site centers)
3
3
1312
75
7
2017
10
3
33

- |   |           |
|---|-----------|
| 4.3.16 Assessment of incidental take of spotted owl site centers that have owl circles overlapping the proposed NRF management areas for the east-side planning units | No change |
| 4.3.17 Assessment of incidental take of projected unknown spotted owl site centers for the east-side planning units   | No change |
| 4.3.18 Summary of incidental take for owl circles outside of NRF management areas, owl circles overlapping NRF management areas, and projected unknown site centers   | No change |
| 4.3.19 Alternative B: Projections of the number of spotted owl site centers with owl circles overlapping NRF management areas in the east-side planning units         | No change |
| 4.3.20 Alternative C: Projections of the number of spotted owl site centers with owl circles overlapping NRF management areas in the east-side planning units         | No change |
| 4.3.21 HCP Dispersal management areas by planning unit  | No change |
| 4.3.22 Total area capable of functioning as dispersal habitat for spotted owls  | No change |

**Table 4.3.23: Summary of alternatives for all criteria**

Alternative B	
19,600 acres -71 percent change high long-term certainty	
narrowly distributed low fragmentation	
incidental take	3229
potential take	18
difficult to accurately predict, depends on federal reserves	
62,100 acres high long-term certainty	
strategically distributed low fragmentation	
decrease in sink population	
increase in parameters governing process	
large reduction	
large reduction	
high risk of habitat loss guaranteed habitat replacement	

- |       |  |           |
|-------|--|-----------|
| 4.4.1 | Comparison of regulated Forest Practices RMZ widths with Riparian-buffer widths established by current practices to protect unstable ground in some areas of the OESF (i.e., 55 percent of state-managed lands in the Experimental Forest) | No change |
| 4.4.2 | Status of known fish stocks in the Olympic Experimental State Forest   | No change |
| 4.4.3 | State-listed plants likely to occur in riparian areas within the Olympic Experimental State Forest   | No change |
| 4.4.4 | Water-quality-limited streams in the Olympic Experimental State Forest   | No change |

pg. 4-295 - change Table 4.4.5 and 4.4.6:

**Table 4.4.5: Average riparian-buffer widths, rounded up to the nearest 10 feet, derived from a statistical analysis of buffer protection previously applied to about 55 percent of state-managed lands on the OESF (see text for discussion)**

Widths are expressed for each stream type as average **slope horizontal** distances measured outward from the active **channel-margin 100-year floodplain margin** (generally coincident with the active channel margin in the OESF) on either side of the stream.

Stream type	Width of riparian interior-core buffer ( <b>slope horizontal</b> distances)
1	150 ft.
2	150 ft.
3	100 ft.
4	100 ft.
5	100 ft.

**Table 4.4.6: Average widths of the OESF exterior riparian buffer**

Widths are expressed for each stream type as average **slope horizontal** distances measured outward from the interior-core buffer on either side of the stream. Widths are proposed as a working hypothesis and are based on local knowledge of windthrow behavior. Buffer widths and design will be evaluated through experiments in buffer design on the OESF.

Stream type	Width of riparian exterior buffer ( <b>slope horizontal</b> distances)
1	150 ft.
2	150 ft.
3	150 ft.
4	50 ft.
5	50 ft.

4.4.7 Comparison of average interior-core buffer widths, by stream type, with site potential tree heights based on 50-, 100-, and 120-year growing periods

No change



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4.4.8	Estimates of forest cover on lands of different ownership in the Olympic Experimental State Forest, July 1991	No change
4.4.9	Estimates of the habitat capability for spotted owls of DNR-managed and all lands in the Olympic Experimental State Forest area, currently and projected 100 years into the future under the No Action, Zoned Forest, and Unzoned Forest alternatives	No change
4.4.10	Model estimates of the current capability of hexagonal sites on DNR-managed and all lands on the Olympic Peninsula to provide habitat suitable to support pairs of spotted owls	No change
4.4.11	Model estimates of the capability in 100 years of hexagonal sites on DNR-managed and all lands on the Olympic Peninsula to provide habitat suitable to support pairs of spotted owls under the No Action, Zoned, and Unzoned Forest HCP alternatives for the OESF	No change
4.4.12	An estimate of the proportion and ownership of potential spotted owl habitat within 2.7 miles of the 69 owl sites within 2.7 miles of DNR-managed lands in the Olympic Experimental State Forest, and the potential for DNR activities under the Zoned Forest alternative to result in incidental take at these sites	No change
4.4.13	An estimate of the proportion and ownership of potential spotted owl habitat within 2.7 miles of the 69 owl sites within 2.7 miles of DNR-managed lands in the Olympic Experimental State Forest, and the potential for DNR activities proposed under the Unzoned Forest alternative to result in incidental take at these sites	No change
4.4.14	Projections of the proportion of the Olympic Experimental State Forest covered by young and old forest owl habitat based on an exploratory analysis of the outcomes of potential management scenarios under the Unzoned Forest alternative	No change
4.5.1	Status of salmonid stocks within the west-side HCP planning units	
4.5.2	Percent of DNR-managed forest land by HCP planning unit watershed analysis units that contain salmonids	No change
4.5.3	Estimated miles of salmonid-bearing streams (Types 1, 2, and 3) by salmonid species on DNR-managed lands in the five HCP planning units west of the Cascade crest (excluding the OESF)	No change
4.5.4	Percent of total land area impacting salmonids that is managed by DNR in the five HCP planning units west of the Cascade crest (excluding the OESF)	No change
4.5.5	Vascular plant taxa within the HCP planning area that are listed or proposed to be listed by the federal government	No change

**Table 4.5.6: Federal candidate vascular plant taxa (as of September 1993) within the HCP planning area that are a special concern to the U.S. Fish and Wildlife Service**

NHP = Natural Heritage Program; POEX = Possibly extinct or extirpated; E = Endangered; T = Threatened; S = Sensitive; OESF = Olympic Experimental State Forest; WW = Western Washington; EW = Eastern Washington within the range of the northern spotted owl.			
Scientific Name	NHP Status	HCP Planning Areas	Geographic Area and/or Habitat Comments
<i>Abronia umbellata</i> ssp. <i>acutalata</i> *	POEX	WW, OESF	coastal dunes
<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>wormskioldii</i> *	E	EW, WW	Columbia River; shoreline
<i>Aster curtus</i>	S	WW	lowland prairies
<i>Astragalus australis</i> var. <i>olympicus</i> *	T	W	NE Olympics; talus/scree
<i>Astragalus pulsiferae</i> var. <i>suksdorfii</i>	E	EW	Klickitat Co.; open forest
<i>Astragalus sinuatus</i> *	E	EW	shrub-steppe
<i>Botrychium ascendens</i>	S	WW, EW	mid- to upper elevations; ridges/meadows
<i>Calochortus longebarbatus</i> var. <i>longebarbatus</i>	S	EW	Klickitat Co.; meadow/open forest
<i>Castilleja cryptantha</i> *	S	WW	Mt. Rainier; moist meadows
<i>Cimicifuga elata</i>	T	WW	low elevation forest
<i>Corydalis aquae-gelidae</i>	T	WW	Skamania and Clark Cos.; seeps, creeks above 2,500 feet
<i>Cypripedium fasciculatum</i>	T	EW	forest
<i>Delphinium leucophaeum</i>	E	WW	SW Washington; lowland prairies

**NHP** = Natural Heritage Program; **POEX** = Possibly extinct or extirpated; **E** = Endangered; **T** = Threatened; **S** = Sensitive; **OESF** = Olympic Experimental State Forest; **WW** = Western Washington; **EW** = Eastern Washington within the range of the northern spotted owl.

Scientific Name	NHP Status	HCP Planning Areas	Geographic Area and/or Habitat Comments
<i>Delphinium viridescens</i>	E	EW	Wenatchee Mtns.; meadows/moist areas
<i>Dodecatheon austrofrigidum</i>	T	WW, OESF	southern Olympics
<i>Erigeron howellii</i>	T	WW	Columbia River Gorge; nonforested areas
<i>Erigeron oreganus</i>	T	WW	Columbia River Gorge; exposed basalt
<i>Filipendula occidentalis</i>	T	WW	SW Washington; riparian
<i>Hackelia venusta</i>	E	EW	Wenatchee National Forest; talus/scree
<i>Lathyrus torreyi</i>	----**	WW	Clark, Pierce Cos.; conifer forest
<i>Lomatium tuberosum</i> *	T	Yakima; Kittitas; Grant Cos.; talus EW EW	Yakima, Kittitas, Grant Cos.; talus
<i>Lomatium suksdorfii</i>	SS	EW	Klickitat Co.; open slopes
<i>Lupinus sulphureus</i> var. <i>kincaidii</i>	E	WW	SW Washington; lowland prairies
<i>Meconella oregana</i>	T	WW, EW	Puget trough and Klickitat Co.; grassland and savannah
<i>Mimulus jungermannioides</i>	POEX	EW	Klickitat Co. seeps in Columbia River basalt

<p><b>NHP = Natural Heritage Program; POEX = Possibly extinct or extirpated; E = Endangered; T = Threatened; S = Sensitive; OESF = Olympic Experimental State Forest; WW = Western Washington; EW = Eastern Washington within the range of the northern spotted owl.</b></p>			
<b>Scientific Name</b>	<b>NHP Status</b>	<b>HCP Planning Areas</b>	<b>Geographic Area and/or Habitat Comments</b>
<i>Penstemon barrettiae</i>	Klickitat Co.; exposed basaltEW, WWFT	EW, WW	Klickitat Co.; exposed basalt
<i>Poa unilateralis</i> *exposed rock <i>Petrophytum cinerascens</i> *	T	WWEW	coastal grassy bluffexposed rock
<i>Ranunculus reconditus</i> *	T	EW	Klickitat Co.; steppe grassland
<i>Rorippa columbiae</i> *	E	EW, WW	Columbia River; shoreline
<i>Wenatchee Mtns.;</i> <i>meadow/forest</i> EW <i>Sidalcea</i> <i>oregana</i> var. <i>calva</i> <i>Silene seelyi</i>	T	EW	Wenatchee Mtns.; exposed rock
<i>Sisyrinchium sarmentosum</i>	T	WW	Skamania and Klickitat Cos.; meadows
<i>Sullivantia oregana</i>	T	WW	Columbia River Gorge; exposed rock
<i>Tauschia hooveri</i> *	T	EW	shrub-steppe
<i>Trifolium thompsonii</i>	T	EW	Chelan and Douglas Cos.; grassland and forest edge

\* These species are unlikely to be affected by proposed HCP management plans. See discussion below.

\*\* The NHP status of *Lathyrus torreyi* was undetermined as of August 1996.

It was thought to be possibly extirpated until a population was discovered on McChord Air Force Base in 1994.

- |       |   |           |
|-------|---|-----------|
| 4.8.1 | Summary of water resources and related influences on DNR-managed lands in the North Puget Planning Unit | No change |
| 4.8.2 | Summary of water resources and related influences on DNR-managed lands in the South Puget Planning Unit | No change |

4.8.3	Summary of water resources and related influences on DNR-managed lands in the Columbia Planning Unit	No change
4.8.4	Summary of water resources and related influences on DNR-managed lands in the Straits Planning Unit	No change
4.8.5	Summary of water resources and related influences on DNR-managed lands in the South Coast Planning Unit	No change
4.8.6	Summary of water resources and related influences on DNR-managed lands in the Chelan Planning Unit	No change
4.8.7	Summary of water resources and related influences on DNR-managed lands in the Yakima Planning Unit	No change
4.8.8	Summary of water resources and related influences on DNR-managed lands in the Klickitat Planning Unit	No change
4.8.9	Summary of water resources and related influences on DNR-managed lands in the OESF Planning Unit	No change
4.8.10	Water-quality-limited streams within (5) west-side planning units	No change
4.8.11	Water-quality-limited streams within (3) east-side planning units	No change
4.8.12	Water-quality-limited streams within the Olympic Experimental State Forest	No change
4.9.1	HCP planning units and major tribes associated with those lands	No change
4.9.2	Types of archaeological and historic sites within the borders of DNR's nine HCP planning units	No change

pg. 4-532 change Table 4.10.1:

**Table 4.10.1: Aggregate harvest levels and timber-related jobs, by alternative**

Source: Total timber-related jobs are based on response coefficients (jobs per million board feet) developed for national forest timber harvest levels in Washington State. Department of Natural Resources 1996-Contact Regional Economist, U.S. Forest Service, Land Management Planning, Region 6 Office, Portland, Oregon.

	Timber Harvest <sup>1</sup> Total Timber-related Jobs <sup>2</sup>					
	Alts. A, 1	Alts. B, 2	Percent Change in Harvest Levels <sup>3,2</sup>	Alts. A, 1 C, 3	Alts. B, 2	Percent Change in Timber-related jobs <sup>3</sup> Harvest Levels <sup>2</sup>
Expected	724.7	776.0	+ 7.1%	14,922.0 606.9	15,448	+3.5% -16.3%
Low	471.0	582	+ 23.5%	9,699.0 455.2	11,586	+18.7% -3.4%

<sup>1</sup> In millions of board feet

<sup>2</sup> Includes direct, indirect, and induced employment from associated harvest level. HCP Alternatives compared with Alts. A, 1.

<sup>3</sup> HCP Alternative B compared with No Action alternative

pg. 4-533 - delete Table 4.10.2 and replace with:

**Table 4.10.2: Timber-related Job and Income Impacts, by Planning Unit and Alternative**

Source: Total timber-related jobs and income are based on response coefficients (jobs and income per million board feet of timber harvest) developed for National Forest timber harvest levels in Washington State. Contact Regional Economist, U.S. Forest Service, Strategic Planning, Region 6 Office, Portland Oregon.

Total Timber-related jobs <sup>1</sup>						Total Timber-related job income <sup>2</sup>				
	No Action	HCP Option B		HCP Option C		No Action	HCP Option B		HCP Option C	
Unit	Jobs	Jobs	Percent change <sup>3</sup>	Jobs	Percent change <sup>3</sup>	,000 Dollars	,000 Dollars	Percent change <sup>3</sup>	,000 Dollars	Percent change <sup>3</sup>
<b>West Side<sup>4</sup>:</b>										
<b>expected</b>	13,671	13,693	+0.2%	10,777	-21.2%	378,683	377,945	-0.2%	294,805	-22.2%
<b>low</b>	8,886	10,270	+15.6%	8,082	-9.0%	246,144	283,459	+15.2%	221,104	-10.2%
<b>East Side<sup>5</sup>:</b>										
<b>expected</b>	313	415	+32.6%	286	-8.7%	7,084	9,380	+32.4%	6,468	-8.7%
<b>low</b>	204	311	+52.5%	215	+5.4%	4,605	7,035	+52.8%	4,851	+5.4%
<b>OESF:</b>										
<b>expected</b>	938	1,340	+42.9%	579	-38.3%	24,990	35,700	+42.9%	15,427	-38.3%
<b>low</b>	610	1,005	+64.8%	434	-28.8%	16,244	26,775	+64.8%	11,571	-28.8%
<b>Total:</b>										
<b>expected</b>	14,922	15,448	3.5%	11,642	-22.0%	410,757	423,025	3.0%	316,700	-22.9%
<b>low</b>	9,700	11,586	19.4%	8,731	-10.0%	266,993	317,269	18.8%	237,526	-11.0%

<sup>1</sup> Includes direct, indirect and induced employment from associated harvest levels.

<sup>2</sup> Includes direct, indirect, and induced employment income from associated harvest level.

<sup>3</sup> Specified Alternative compared with No Action alternative.

<sup>4</sup> Columbia, Straits, North Puget, South Puget and South Coast planning units.

<sup>5</sup> Chelan, Yakima, and Klickitat planning units.



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## Tables in Appendices

1	Vegetative zones of area covered by the HCP	No change
2	Comparison of classification systems	No change
3	Comparison of Seral Stage Structure and Vegetation	No change
4	Estimates of forest cover on lands of different ownership in the Olympic Experimental Forest area, July 1991	No change
5	Complete list of model parameters and control variables used in spotted owl simulations	No change
6	Forest classifications used in GIS data	No change
7	Landscape parameters and values	No change
8	Values used in calculation of suitable spotted owl habitat threshold	No change
9	Forest growth model used for projecting changes in national forest Late-Successional Reserves	No change

## Figures

1-1	How this draft EIS is organized	No change
4.2.1	Acres of potential spotted owl habitat on DNR-managed lands in the five west-side planning units	No change
4.2.2	Distribution of territorial activity centers affecting DNR-managed lands in the five west-side planning units	No change
4.2.3	Amount of habitat on DNR-managed lands within territorial spotted owl circles in the five west-side planning units	No change
4.2.4	Age class distribution on DNR-managed lands from 1996 to 2096 - Alternative A	No change
4.2.5	Age class distribution within five west-side planning units under Alternative B - 1996	No change
4.2.6	Age class distribution within five west-side planning units under Alternative B - 2046	No change
4.2.7	Age class distribution within five west-side planning units under Alternative B - 2096	No change
4.2.8	Age class distribution within DNR NRF areas from 1996 to 2096 - Alternative B	No change
4.2.9	Age class distribution within DNR dispersal areas from 1996 to 2096 - Alternative B	No change
4.2.10	Mean detection rates (number of birds detected per survey morning) of marbled murrelets at 151 sites surveyed in western Washington compared to the calculated probability that each site is occupied by marbled murrelets	No change
4.2.11	The relationship between riparian ecosystem and DNR's riparian management zone	No change
4.3.1	Schematic representation of the conceptual model for demographic support	No change
4.4.1	Schematic example of interior-core and exterior riparian buffers placed on a stream in the OESF	No change
4.4.2	Schematic example of a riparian buffer on a Type 5 channel	No change
4.4.3	Example of riparian buffers currently being applied on a portion of the Clallam River landscape to protect unstable channel banks and	

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	adjacent hillslopes	No change
4.4.4	Application of interior-core and exterior buffers to a segment of the Clallam River and its tributaries	
4.4.5	Comparison of interior-core and exterior buffers combined with buffers designed in the field to protect mass-wasting sites	No change
4.4.6	One possible example of a buffer configuration that results from adjusting interior-core and exterior buffers to protect known mass-wasting sites	No change
4.4.7	Estimates of habitat capability for spotted owls of the Olympic Experimental State Forest areas currently, and under the No Action, Zoned Forest, and Unzoned Forest HCP alternatives	No change
4.4.8	Hexagonal habitat map constructed to represent current conditions	No change
4.4.9	Histogram of numeric distribution of site scores at year 100 derived from hexagonal habitat map in Figure 4.4.8 (year 2094)	No change
4.4.10	The numbers of suitable sites projected to result from each of the HCP alternatives for the OESF	No change
4.4.11	Time series of hexagonal habitat maps constructed for the No Action alternative for the OESF	No change
4.4.12	Time series of hexagonal habitat maps constructed for the Zoned Forest alternative for the OESF	No change
4.4.13	Time series of hexagonal habitat maps constructed for the Unzoned Forest alternative for the OESF	No change
4.4.14	Projected trajectories of the Olympic Peninsula spotted owl population	No change
1a-c	Nonlinear functions describing the relationship between spotted owl site score (habitat quality) and certain parameters	No change
2	Flow chart showing one yearly cycle through the spotted owl population simulator	No change

## Maps

Map 1	HCP Planning Area with Unit Boundaries	No change
Map 2	HCP Planning Units	No change
Map 3	Five West-side Planning Units	No change
Map 4	Olympic Experimental State Forest Planning Unit	No change
Map 5	Three East-Side Planning Units	No change
Map 6	Location of Uneven-Aged and Even-Aged Stands on DNR-Managed Lands Covered by the HCP	No change
Map 7	Spotted Owl Conservation under Alternative A within the North Puget Planning Unit	No change
Map 8	Spotted Owl Conservation under Alternative A within the South Puget Planning Unit	No change
Map 9	Spotted Owl Conservation under Alternative A within the Columbia Planning Unit	No change
Map 10	Spotted Owl Conservation under Alternative A within the Straits Planning Unit	No change

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Map 11 Spotted Owl Conservation under Alternative A within the South Coast Planning Unit	No change
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**Map 12 Spotted Owl Conservation under Alternative B within the North Puget Planning Unit**

Refer to Appendix 3, Changes to DNR's draft Habitat Conservation Plan, Map IV.1.

**Map 13 Spotted Owl Conservation under Alternative B within the South Puget Planning Unit**

Refer to Appendix 3, Changes to DNR's draft Habitat Conservation Plan, Map IV.2.

**Map 14 Spotted Owl Conservation under Alternative B within the Columbia Planning Unit**

Refer to Appendix 3, Changes to DNR's draft Habitat Conservation Plan, Map IV.3.

Map 15 Spotted Owl Conservation under Alternative B within the Straits Planning Unit	No change
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Map 16 Spotted Owl Conservation under Alternative B within the South Coast Planning Unit	No change
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Map 17 Spotted Owl Conservation under Alternative C within the Straits Planning Unit	No change
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Map 18 Spotted Owl Conservation under Alternative C within the South Coast Planning Unit	No change
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Map 19 Spotted Owl Conservation under Alternative A within the Chelan Planning Unit	No change
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Map 20 Spotted Owl Conservation under Alternative A within the Yakima Planning Unit	No change
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Map 21 Spotted Owl Conservation under Alternative A within the Klickitat Planning Unit	No change
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Map 22 Spotted Owl Conservation under Alternative B within the Chelan Planning Unit	No change
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Map 23 Spotted Owl Conservation under Alternative B within the Yakima Planning Unit	No change
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**Map 24 Spotted Owl Conservation under Alternative B within the Klickitat Planning Unit**

Please refer to Appendix 3, Changes to DNR's draft Habitat Conservation Plan, Map 4.6.

Map 25 Spotted Owl Conservation under Alternative C within the Klickitat Planning Unit	No change
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Map 26 Current Land Cover from Satellite Imagery of the Olympic Experimental State Forest Planning Unit	No change
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Map 27 Alternative 3 (Zoned Forest) within the Olympic	
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Experimental State Forest Planning Unit	No change
Map 28 Spotted Owl Conservation under Alternative 1 within the Olympic Experimental State Forest Planning Unit	No change
Map 29 HCP Planning Units and Spotted Owl Provinces	No change
Map 30 Current Habitat Conditions on the Olympic Peninsula	No change